ABSTRACT

Make-up water derived from an on-shore treatment facility is returned to a slurry processing unit on board a dredge by means of a water supply pipeline floating alongside a slurry delivery pipeline that conveys dredged material to the on-shore treatment facility. After separation from the slurry solids, the return water is pressurized to a transport pressure at the treatment facility with a centrifugal pump and then boosted to the desired working pressure once aboard the dredge. This two-stage pumping and re-cycling process reduces the amount of clear make-up water needed for proper operation of the slurry processing unit by more than 50%. This has resulted in a substantial reduction in the overall cost of remediation by reducing the amount of water that must be cleaned prior to disposal.